

METHOD FOR JOINING CONDUCTIVE STRUCTURES AND AN ELECTRICAL CONDUCTIVE ARTICLE

Abstract of the Disclosure

Embodiments of the invention include a method comprising disposing a thin metallic layer having a low melting temperature between one end of a conductive post on a substrate and a conducting structure on an opposing substrate. Heated platens in contact with the substrates can apply pressure and heat to the thin metallic layer and cause it to be entirely consumed and subsequently transformed into a bonding layer having a melting temperature higher than the melting temperature of the original thin metallic layer. Prior to, during, or after the conductive post is bonded to the conducting structure, the region around the conductive post and between the substrates may be filled with a dielectric material, such as polyimide.